

### **Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A machine-implemented method, comprising:  
receiving, at a computer system, user-generated data through a user interface, the user-generated data comprising:  
a primary term ~~representing~~ that represents a new first concept to be ~~created in~~  
added to an existing machine-readable network of interrelated concepts, wherein each concept in  
~~the existing machine-readable network of interrelated concepts comprises a normalized semantic~~  
~~representation that is defined in the existing machine-readable network of interrelated concepts~~  
~~by a group of synonyms,~~  
a ~~first related term and a second related term~~ one or more other terms that are  
~~associated~~ synonymous with the primary term, and that also represent the new first concept, ~~the~~  
~~first and the second related terms being synonyms,~~  
information specifying at least one relationship between the new first concept and  
a second concept,  
information specifying a relationship type ~~characterizing~~ of the at least one  
relationship, and  
information specifying a strength ~~value~~ characterizing of the at least one  
relationship in a direction from the new first concept to the second concept;  
receiving, at the computer system, a user request to add the new first concept to the  
existing machine-readable network of interrelated concepts; and  
adding ~~creating~~, at the computer system, the new first concept in the existing machine-  
readable network of interrelated concepts ~~to expand the existing network of interrelated concepts~~  
~~by adding the new first concept to the existing network of interrelated concepts, wherein creating~~  
~~the new first concept comprises adding data representing~~ the primary term, the first and the  
second related one or more other terms, the information specifying the relationship between the

~~first concept and the second concept, the information specifying the relationship type, and the information specifying the strength value of the at least one relationship in the direction from the new first concept to the second concept, to the existing machine-readable network of interrelated concepts, wherein the strength in the direction from the new first concept to the second concept is different than a strength in a direction from the second concept to the new first concept to represent the new first concept and the relationship between the first concept and the second concept, wherein the first and the second related terms define the first new concept as members of the group of synonyms that defines the first new concept.~~

2. (Cancelled)

3. (Previously Presented) The method of claim 1, wherein the user-generated data comprises information characterizing a part of speech of the new first concept.

4. (Currently Amended) The method of claim 1, wherein the relationship comprises ~~a hierarchical relationship or~~ a lateral bond that indicates a proximity of the new first concept to the second concept in semantic space.

5. (Previously Presented) The method of claim 1, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."

6. (Previously Presented) The method of claim 1, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

7. (Currently Amended) The method of claim 1, wherein the user-generated data comprises information that characterizes a likelihood that the primary term and the ~~related~~ other terms imply the new first concept.

8. (Previously Presented) The method of claim 1, wherein the user-generated data comprises information that characterizes a breadth of the new first concept.

9. (Previously Presented) The method of claim 1, wherein the user-generated data comprises information that indicates that the new first concept is offensive.

10. (Previously Presented) The method of claim 1, wherein the user-generated data comprises information that describes the new first concept.

11. (Previously Presented) The method of claim 1, wherein the user-generated data comprises context information.

12. (Currently Amended) A machine-implemented method, comprising:

receiving, from a user interacting with a user interface of a client processor, a request to edit a first concept in an existing machine-readable network of interrelated concepts, ~~wherein a each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation and is defined in the existing machine-readable network of interrelated concepts by a group of synonyms;~~

displaying a particular group of synonyms that defines the first concept and a description of one or more existing relationships between the first concept and other concepts in the existing machine-readable network of interrelated concepts;

receiving user-generated data comprising:

information specifying at least one new relationship between the first concept and a second concept,

information specifying a relationship type ~~characterizing a type~~ of the at least one new relationship, and

information specifying a strength ~~value characterizing a strength~~ of the at least one new relationship in a direction from the first concept to the second concept; and

transmitting a request for a semantic engine to update the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the

strength in the direction from the first concept to the second concept, without updating a strength in a direction from the second concept to the first concept value.

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The method of claim 12, wherein the new relationship comprises a ~~hierarchical relationship or~~ a lateral bond that indicates a proximity of the first concept to the second concept in semantic space.

16. (Previously Presented) The method of claim 12, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."

17. (Previously Presented) The method of claim 12, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

18. (Previously Presented) The method of claim 12, wherein the user-generated data comprises information that characterizes a likelihood that a primary term and related terms imply the first concept.

19. (Previously Presented) The method of claim 12, wherein the user-generated data comprises information that characterizes a breadth of the first concept.

20. (Currently Amended) One or more computer-readable storage devices comprising program code tangibly embodied in machine-readable format and operable to cause one or more machines to perform operations, the operations comprising:

~~receiving,~~ receiving user-generated data through a user interface, the user-generated data comprising:

a primary term ~~representing that represents~~ a new first concept to be created in added to an existing machine-readable network of interrelated concepts, ~~wherein each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation that is defined in the existing machine-readable network of interrelated concepts by a group of synonyms,~~

~~a first related term and a second related term~~ one or more other terms that are associated synonymous with the primary term, and that also represent the new first concept, ~~the first and the second related terms being synonyms,~~

information specifying at least one relationship between the new first concept and a second concept,

information specifying a relationship type ~~characterizing of~~ the at least one relationship, and

information specifying a strength ~~value characterizing of~~ the at least one relationship in a direction from the first new concept to the second concept;

receiving a user request to add the new first concept to the existing machine-readable network of interrelated concepts; and

adding creating the new first concept in the existing machine-readable network of interrelated concepts ~~to expand the existing network of interrelated concepts by adding the new first concept to the existing network of interrelated concepts, wherein creating the new first concept comprises adding data representing the primary term, the first and the second related~~ one or more other terms, the information specifying the relationship between the first concept and the second concept, the information specifying the relationship type, and the information specifying the strength value of the at least one relationship in the direction from the new first concept to the second concept, to the existing machine-readable network of interrelated concepts, wherein the strength in the direction from the new first concept to the second concept is different than a strength in a direction from the second concept to the new first concept ~~to represent the new first concept and the relationship between the first concept and the second concept, wherein the first and the second related terms define the first new concept as members of the group of synonyms that defines the first new concept.~~

21. (Cancelled)

22. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information that characterizes a part of speech of the new first concept.

23. (Currently Amended) The computer-readable storage devices of claim 20, wherein the relationship comprises ~~a hierarchical relationship~~ or a lateral bond that indicates a proximity of the new first concept to the second concept in semantic space.

24. (Previously Presented) The computer-readable storage devices of claim 20, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."

25. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

26. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information that characterizes a likelihood that the primary term and the related terms imply the new first concept.

27. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information that characterizes a breadth of the new first concept.

28. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information that indicates that the new first concept is offensive.

29. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises information describing the new first concept.

30. (Previously Presented) The computer-readable storage devices of claim 20, wherein the user-generated data comprises context information.

31. (Currently Amended) One or more computer-readable storage devices comprising program code tangibly embodied in machine-readable format and operable to cause one or more machines to perform operations, the operations comprising:

receiving, from a user interacting with a user interface of a client processor, a request to edit a first concept in an existing machine-readable network of interrelated concepts, ~~wherein each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation and is defined in the existing machine-readable network of interrelated concepts by a group of synonyms;~~

displaying a particular group of synonyms that defines the first concept and a description of one or more existing relationships between the first concept and other concepts in the existing machine-readable network of interrelated concepts;

receiving user-generated data comprising:

information specifying at least one new relationship between the first concept and a second concept,

information specifying a relationship type ~~characterizing a type~~ of the at least one new relationship, and

information specifying a strength ~~value characterizing a strength~~ of the at least one new relationship in a direction from the first concept to the second concept; and

transmitting a request for a semantic engine to update the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the strength in the direction from the first concept to the second concept, without updating a strength in a direction from the second concept to the first concept value.

32. (Cancelled)

33. (Cancelled)

34. (Currently Amended) The computer-readable storage devices of claim 31, wherein the new relationship comprises ~~a hierarchical relationship~~ or a lateral bond that indicates a proximity of the first concept to the second concept in semantic space.

35. (Previously Presented) The computer-readable storage devices of claim 31, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."-

36. (Previously Presented) The computer-readable storage devices of claim 31, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

37. (Previously Presented) The computer-readable storage devices of claim 31, wherein user-generated data comprises information that characterizes a likelihood that a primary term and related terms imply the first concept.

38. (Previously Presented) The computer-readable storage devices of claim 31, wherein user-generated data comprises information that characterizes a breadth of the first concept.

39 – 42. (Cancelled)

43. (Previously Presented) The method of claim 1, wherein creating the new first concept in the existing machine-readable network of interrelated concepts comprises storing the new first concept in a concept database stored at the computer system.

44. (Cancelled)

45. (Previously Presented) The computer-readable storage devices of claim 20, wherein creating the new first concept in the existing machine-readable network of interrelated concepts



comprises storing the new first concept in a concept database stored at one or more of the computer-readable storage devices.

46. (Previously Presented) The computer-readable storage devices of claim 31, wherein updating the machine-readable network of interrelated concepts comprises updating a concept database stored at one or more of the computer-readable storage devices.

47 – 54. (Cancelled)

55. (New) A system comprising:

one or more computers; and

a computer-readable medium coupled to the one or more computers having instructions stored thereon which, when executed by the one or more computers, cause the one or more computers to perform operations comprising:

receiving, at a computer system, user-generated data through a user interface, the user-generated data comprising:

a primary term that represents a new first concept to be ~~created in~~ added to an existing machine-readable network of interrelated concepts,

one or more other terms that are synonymous with the primary term, and that also represent the new first concept,

information specifying at least one relationship between the new first concept and a second concept,

information specifying a relationship type of the at least one relationship, and

information specifying a strength of the at least one relationship in a direction from the new first concept to the second concept;

receiving, at the computer system, a user request to add the new first concept to the existing machine-readable network of interrelated concepts; and

adding, at the computer system, the new first concept in the existing machine-readable network of interrelated concepts by adding the primary term, the one or more other

terms, the information specifying the relationship, the information specifying the relationship type, and the information specifying the strength of the at least one relationship in the direction from the new first concept to the second concept, to the existing machine-readable network of interrelated concepts, wherein the strength in the direction from the new first concept to the second concept is different than a strength in a direction from the second concept to the new first concept.

56. (New) The system of claim 55, wherein the user-generated data comprises information characterizing a part of speech of the new first concept.

57. (New) The system of claim 55, wherein the relationship comprises a lateral bond that indicates a proximity of the new first concept to the second concept in semantic space.

58. (New) The system of claim 55, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."

59. (New) The system of claim 55, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

60. (New) The system of claim 55, wherein the user-generated data comprises information that characterizes a likelihood that the primary term and the other terms imply the new first concept.

61. (New) The system of claim 55, wherein the user-generated data comprises information that characterizes a breadth of the new first concept.

62. (New) The system of claim 55, wherein the user-generated data comprises information that indicates that the new first concept is offensive.

63. (New) The system of claim 55, wherein the user-generated data comprises information that describes the new first concept.

64. (New) The system of claim 55, wherein the user-generated data comprises context information.

65. (New) A system comprising:

one or more computers; and

a computer-readable medium coupled to the one or more computers having instructions stored thereon which, when executed by the one or more computers, cause the one or more computers to perform operations comprising:

receiving, from a user interacting with a user interface of a client processor, a request to edit a first concept in an existing machine-readable network of interrelated concepts;

displaying a particular group of synonyms that defines the first concept and a description of one or more existing relationships between the first concept and other concepts in the existing machine-readable network of interrelated concepts;

receiving user-generated data comprising:

information specifying at least one new relationship between the first concept and a second concept,

information specifying a relationship type of the at least one new relationship, and

information specifying a strength of the at least one new relationship in a direction from the first concept to the second concept; and

transmitting a request for a semantic engine to update the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the strength in the direction from the first concept to the second concept, without updating a strength in a direction from the second concept to the first concept.

66. (New) The system of claim 65, wherein the new relationship comprises a lateral bond that indicates a proximity of the first concept to the second concept in semantic space.

67. (New) The system of claim 65, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product."

68. (New) The system of claim 65, wherein the user-generated data comprises information that characterizes a frequency of the primary term.

69. (New) The system of claim 65, wherein the user-generated data comprises information that characterizes a likelihood that a primary term and related terms imply the first concept.

70. (New) The system of claim 65, wherein the user-generated data comprises information that characterizes a breadth of the first concept.